Bay TMDL Tracking and Accounting
Overview of Major System Design Components/Considerations

EPA Region 3 -
Water Protection Division,
Chesapeake Bay Program Office (CBPO)

BayTMDL Accounting and Tracking System (BayTAS) Version 1.0

- Purpose and Reason for BayTAS Version 1.0
- Project Management Team
- Data Needs and Process for Tracking WLAs, LAs, and Measuring Progress
- Overview of Proposed Data Flows/Basic System Configuration and Public Presentation of Information
- Key BayTAS Milestones

BayTAS Version 1.0 Purpose

- Required by Executive Order 13508, "Strategy for Protecting and Restoring the Chesapeake Bay Watershed" - May 12 2010
  - Begin to use the system by Jan 2011
  - Also an obligation of the CBF Settlement Agreement
- Track TMDLs for 92 Segments in Bay Watershed
  - Track WLAs for NPDES Point Sources; Track LAs for Non-Point Sources/Sectors; Track Practices reported in WIPS
- Are States on target to achieve the Bay TMDL?
  - Are WLAs being achieved? Are LA's being achieved?
  - What is the status of BMP practice implementation and programmatic activities?
  - What is status of 2-year milestones?
  - Verification tracking
  - Future capacity to track generation of offsets and support trading
- Make allocations, progress and verification public

BayTAS Design Team

- BayTAS design managed by an "Integrated Project Team"
- EPA Region 3 (WPD & CBPO), States are major stakeholders
- EPA Region 3 (WPD & CBPO) are project sponsors
- Integrated Project Team Consists of:
  - Project Manager (from EPA HQ)
  - CBPO and WPD TMDL Experts
  - State TMDL Experts (Recently received interest from 3 States to be Team Members)
  - Others as needed

BayTAS will track WLAs for Point Sources

- Track Individual or Aggregate WLAs for NPDES Permits established Dec 31st, 2010 TMDL
- WLAs stored in BayTAS for Individual and General Permits
  - Both Significant and Non-Significant Dischargers
- Progress in meeting WLAs is determined by Watershed model outputs and/or DMR/actual monitoring data
- Separately, PCS and ICIS-NPDES will be used to track compliance with WQBELs
- Permit Compliance and TMDL Progress are Separate but:
  - BayTAS will flag permits with compliance issues
  - Flag Status of Compliance Schedules

WLA Tracking Data Requirements – Individual Permits

Data Category/Classes for Individual Permits
Basic Facility/Permit Tracking (name, location, permit issue, effective and expiration dates)
Wasteload Allocations reported in WIPs
Results of Model Progress Runs (to determine how point sources are doing as a whole) OR Actual Monitoring Data (DMRs) for N, P, S
Compliance Schedule Information (Nutrient Removal Upgrades etc.)
Verification information: Verifier name, type, % of inspections, penalties, and confidence levels.

WLA and Progress Data Reporting – Data Sources for NPDES Point Sources

- How will BayTAS Get Point Source Data for Progress Runs
- Option 1 or Short/Medium Term
  - Existing data reported to CBPO or through NEIEN as specified in CWA §117 grant guidance
- Option 2 or Long Term
  - Direct Reporting for ALL settlement-affected permits in Bay Watershed into PCS and ICIS-NPDES
  - DMR and Other Data is transferred from PCS/ICIS-NPDES to BayTAS by O&M Team

BayTAS – Non-Point Source Tracking

- Load Allocations and Practices will be reported in the Phase I WIPs
  - Load Allocations will be entered into BayTAS
  - Practices will be entered into BayTAS
- Tracking Progress for Non-Point Sources
- Progress (load reductions and practices) will be reported for each scenario builder segment and non-point sector using National Environmental Exchange Network (NEIEN)
- Outputs from the Watershed Model will be aggregated for N, P, S to the segment and Non-Point Sector level and stored in BayTAS

BayTAS – Key Assumptions for Non-Point Sources

- Bay Program will only accept BMP data submitted via NEIEN
  - NEIEN scheduled to be completed by Dec, 2010
  - Progress Tracking and BMP Implementation Tracking will first be required in late 2011
- The Watershed Models outputs can be aggregated up to each Bay TMDL Segment to estimate
  - Loadings for each Non-Point Sector
  - BMP Implementation Status

Reporting BayTAS Data to Stakeholders and Back-End

- BayTAS database will store TMDL and Progress Information
- Chesapeake Stats will be used to present data to stakeholders
- BayTAS will also have Back-End Screens/Functionality
  - To enable States/Jurisdictions to review data before it becomes public
  - For manual entry for system operation and maintenance

NEIEN Data Reported/Transformed for Model Use

Data Category/Classes for Non-Point Sources to Scenario Builder/Watershed Model
Year
Segment ID (this is NOT one of the 92 segments but rather the scenario builder input id, each id "should" roll up to the 92 segments where the allocations actually occur. Segment captures BMP location from NEIEN information.
BMPs – a standardized list of BMPs for all 7 States (still being built)
Amount and Units (acres, percent, feet or pounds)
Land Use
Verification Data: Who is verifying? Type? % Inspections? Penalties? Confidence Level.

Proposed Non-Point Source Data Flows – Entering load Allocations and Practices

Sep 1, 2010

Draft WIPs are submitted. WIPS contain load allocations for each non-point sector for each of the 92 Segments.

BayTAS Design Team reviews WIPs and adjusts system design to track load allocations and practices as reflected in WIPs

Dec. 31, 2010

EPA Publishes Final TMDL (either what is proposed in WIP or as assigned)

Jan, 31 2011 onward

BayTAS O&M Team Inputs Load Allocations and Practices into BayTAS

Data is Reported to Public Via ChesapeakeStat

Non-Point Source Data Flows –

Tracking progress towards allocations and practice implementation

>Jan 31, 2011

BayTAS O&M Team Inputs Load Allocations and Practices from WIPs and Final TMDL

NEIEN exchanges data between partners and Scenario Builder.

Watershed Model runs will be used to determine progress towards milestones

Outputs and Results of Model runs – progress and practice status flow into BayTAS.

Data is reported via Chesapeake Stat

Jan, 31 2011 onward

Proposed System Configuration and Flows

WLA and LA, assumptions and commitments reported in WIPs and final TMDL

Feds, States and DC submit Non-Point Source Load, Practices/Verification using NEIEN

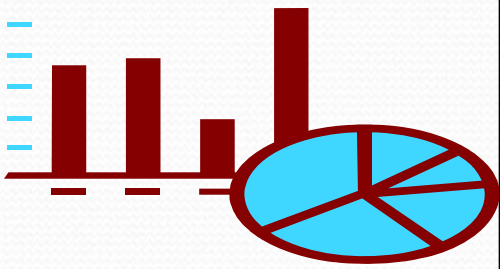
Wastewater Point Source Data Direct Reporting OR PCS/ICIS

Scenario Builder

Watershed Model runs determine progress towards meeting allocations.

Back-end – BayTAS O&M Team and State Access (QA, review etc.)

BayTAS (In CBPO IT Infrastructure)



To Chesapeake Stat for Presentation

BayTAS Version 1.0 Key Milestone Schedule

High-Level Design Framework	July 2010
Version 0.5 of BayTAS	Oct, 2010
Testing/Debugging/Design Adjustments of Version 0.5	Oct, 2010
Version 1.0 of BayTAS	Jan, 2011